CLAIMS

1. A method for detecting leaked buffer writes between a first consistency point and a second consistency point, the method comprising:

receiving a write operation directed to a file;

creating a data buffer associated with the write operation; and

writing a buffer check control structure to a raw data buffer associated with the data buffer.

2. The method of claim 1 wherein the step of creating the data buffer further comprises the step of creating a buffer control structure and a raw data buffer.

3. The method of claim 2 wherein the buffer control structure comprises a pointer to the raw data buffer.

4. The method of claim 1 wherein the step of writing the buffer check control structure to the raw data buffer further comprises the steps of:

creating the buffer check control structure; and

overwriting a portion of the raw data buffer with the buffer check control structure.

5. The method of claim 1 wherein the step of writing the buffer check control structure to the raw data buffer further comprises the steps of:

creating the buffer check control structure; and

associating the buffer check control structure to the raw data buffer in a contiguous block of memory.

6. The method of claim 4 wherein the buffer check control structure comprises:

one or more magic numbers; and

a consistency point number.

7. The method of claim 6 wherein the one or more magic number comprises a 64-bit value.

8. The method of claim 6 wherein one or more magic number values comprises two 32-bit values.

9. The method of claim 6 wherein the consistency point number identifies a current consistency point.

10. The method of claim 6 wherein the consistency point number comprises a 32-bit value.

11. A method for detecting leaked buffer writes between a first consistency point and a second consistency point, the method comprising steps of:

selecting a data buffer;

determining if the selected data buffer includes a buffer check control structure;

determining, in response to the selected data buffer including a buffer check control structure, if a consistency point number within the buffer check control structure is correct; and

performing, in response to determining that the consistency point number within the buffer check control structure is correct, a write operation of the file system buffer.

12. The method of claim 11 wherein the step of determining if the data buffer comprises a buffer check control structure further comprises a step of determining if one or more magic values are within the data buffer.

13. The method of claim 12 wherein one or more magic values comprise a 64-bit magic number.

14. The method of claim 12 wherein one or more magic values further comprises two 32-bit magic numbers.

15. The method of claim 11 wherein the step of determining if the consistency point number is correct further comprises the step of determining if the consistency point number within the buffer check control structure equals a consistency point number identifying a current consistency point.

16. The method of claim 11 wherein the step of performing a write operation further comprises a step of writing a set of raw data within the data buffer to disk.

17. The method of claim 16 wherein the raw data comprises the buffer check control structure.

18. The method of claim 16 wherein the step of performing the write operation further comprises a step of removing the buffer check control structure from the data before writing the file system buffer to disk.

19. The method of claim 16 wherein the step of performing the write operation comprises the step of writing only the raw data within the file system buffer to disk.

20. A system for detecting leaked buffer writes between a first consistency point and a second consistency point, the system comprising:

means for receiving write operations;

means for creating a data buffer associated with the file; and

means for writing a buffer check control structure to a raw data buffer associated with the data buffer.